

ABSTRACT

[0132] A copper-based alloy casting includes 69 to 88% of Cu, 2 to 5% of Si, 0.0005 to 0.04% of Zr, 0.01 to 0.25% of P by mass, and a remainder including Zn and inevitable impurities, and satisfies $60 \leq \text{Cu} - 3.5 \times \text{Si} - 3 \times \text{P} \leq 71$. Further, mean grain size after melt-solidification is 100 μm or less, and α , κ and γ -phases occupy more than 80% of phase structure. Furthermore, the copper-based alloy casting according to the invention can further include at least one element selected from a group consisting of 0.001 to 0.2% of Mg, 0.003 to 0.1% of B, 0.0002 to 0.01% of C, 0.001 to 0.2% of Ti and 0.01 to 0.3% of rare earth element.